

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-115487-2

Client Project/Site: Gold King Mine - Region 9

For:

Weston Solutions, Inc.

1400 Weston Way

PO BOX 2653

West Chester, Pennsylvania 19380

Attn: Ms. Gretchen Fodor



Authorized for release by:

8/13/2015 6:04:26 PM

Sheila Hoffman, Project Manager II

(912)354-7858 e.3004

sheila.hoffman@testamericainc.com

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

# Case Narrative

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Job ID: 680-115487-2**

**Laboratory: TestAmerica Savannah**

## Narrative

### CASE NARRATIVE

**Client: Weston Solutions, Inc.**

**Project: Gold King Mine - Region 9**

**Report Number: 680-115487-2**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

#### RECEIPT

The samples were received on 08/12/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.8° C, 3.0° C, 4.0° C, 4.2° C, 4.2° C, 4.2° C, 5.0° C and 5.8° C.

#### TOTAL DISSOLVED SOLIDS

Samples SJMC-081015-12 (680-115487-1), SJME-081015-11 (680-115487-2), SJMC-081015-11 (680-115487-3), SJ4C-081015-11 (680-115487-4), SJSR-081015-11 (680-115487-5), SJFP-081015-11 (680-115487-6), SJBB-081015-11 (680-115487-7), SJMH-081015-11 (680-115487-8), MECT-081015-11 (680-115487-9), SJLP-081015-11 (680-115487-10), SJDS-081015-11 (680-115487-11), SJHB-081015-11 (680-115487-12), SJHB-081015-12 (680-115487-13), SJ4C-081115-11 (680-115487-14), SJ4C-081115-12 (680-115487-15), SJSR-081115-11 (680-115487-16), SJMH-081115-11 (680-115487-17), SJBB-081115-11 (680-115487-18), SJMC-081115-11 (680-115487-19), SJME-081115-11 (680-115487-20), SJME-081115-12 (680-115487-21), MECT-081115-11 (680-115487-22), SJFP-081115-11 (680-115487-23), SJHB-081115-11 (680-115487-24), SJDS-081115-11 (680-115487-25) and SJLP-081115-11 (680-115487-26) were analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 08/12/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Sample Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-115487-1	SJMC-081015-12	Water	08/10/15 13:40	08/12/15 09:46
680-115487-2	SJME-081015-11	Water	08/10/15 14:40	08/12/15 09:46
680-115487-3	SJMC-081015-11	Water	08/10/15 13:35	08/12/15 09:46
680-115487-4	SJ4C-081015-11	Water	08/10/15 15:05	08/12/15 09:46
680-115487-5	SJSR-081015-11	Water	08/10/15 12:10	08/12/15 09:46
680-115487-6	SJFP-081015-11	Water	08/10/15 10:35	08/12/15 09:46
680-115487-7	SJBB-081015-11	Water	08/10/15 12:40	08/12/15 09:46
680-115487-8	SJMH-081015-11	Water	08/10/15 11:35	08/12/15 09:46
680-115487-9	MECT-081015-11	Water	08/10/15 14:15	08/12/15 09:46
680-115487-10	SJLP-081015-11	Water	08/10/15 09:40	08/12/15 09:46
680-115487-11	SJDS-081015-11	Water	08/10/15 13:25	08/12/15 09:46
680-115487-12	SJHB-081015-11	Water	08/10/15 11:25	08/12/15 09:46
680-115487-13	SJHB-081015-12	Water	08/10/15 11:25	08/12/15 09:46
680-115487-14	SJ4C-081115-11	Water	08/11/15 09:52	08/12/15 09:46
680-115487-15	SJ4C-081115-12	Water	08/11/15 09:52	08/12/15 09:46
680-115487-16	SJSR-081115-11	Water	08/11/15 12:35	08/12/15 09:46
680-115487-17	SJMH-081115-11	Water	08/11/15 10:35	08/12/15 09:46
680-115487-18	SJBB-081115-11	Water	08/11/15 11:30	08/12/15 09:46
680-115487-19	SJMC-081115-11	Water	08/11/15 12:20	08/12/15 09:46
680-115487-20	SJME-081115-11	Water	08/11/15 13:30	08/12/15 09:46
680-115487-21	SJME-081115-12	Water	08/11/15 13:35	08/12/15 09:46
680-115487-22	MECT-081115-11	Water	08/11/15 13:45	08/12/15 09:46
680-115487-23	SJFP-081115-11	Water	08/11/15 13:45	08/12/15 09:46
680-115487-24	SJHB-081115-11	Water	08/11/15 13:05	08/12/15 09:46
680-115487-25	SJDS-081115-11	Water	08/11/15 11:40	08/12/15 09:46
680-115487-26	SJLP-081115-11	Water	08/11/15 14:25	08/12/15 09:46

TestAmerica Savannah

# Method Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

Method	Method Description	Protocol	Laboratory
2540C-2011	Total Dissolved Solids (Dried at 180 °C)	SM	TAL SAV

## Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

## Definitions/Glossary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

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### Qualifiers

#### General Chemistry

Qualifier	Qualifier Description
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U	Indicates the analyte was analyzed for but not detected.
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### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Savannah

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJMC-081015-12**  
**Date Collected: 08/10/15 13:40**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-1**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	350		10	10	mg/L	-		08/12/15 15:26	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJME-081015-11**  
**Date Collected: 08/10/15 14:40**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-2**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		10	10	mg/L	-		08/12/15 15:26	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJMC-081015-11**  
**Date Collected: 08/10/15 13:35**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-3**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	360		10	10	mg/L	-		08/12/15 15:26	1



# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJ4C-081015-11**  
**Date Collected: 08/10/15 15:05**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-4**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	390		10	10	mg/L	-		08/12/15 15:26	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJSR-081015-11**  
**Date Collected: 08/10/15 12:10**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-5**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	330		10	10	mg/L	-		08/12/15 15:26	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJFP-081015-11**  
**Date Collected: 08/10/15 10:35**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-6**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	270		10	10	mg/L	-		08/12/15 15:26	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJBB-081015-11**  
**Date Collected: 08/10/15 12:40**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-7**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	380		10	10	mg/L	-		08/12/15 15:26	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJMH-081015-11**  
**Date Collected: 08/10/15 11:35**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-8**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		10	10	mg/L	-		08/12/15 15:26	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: MECT-081015-11**  
**Date Collected: 08/10/15 14:15**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-9**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10	10	mg/L	-		08/12/15 15:26	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJLP-081015-11**  
**Date Collected: 08/10/15 09:40**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-10**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	260		10	10	mg/L	-		08/12/15 15:26	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJDS-081015-11**  
**Date Collected: 08/10/15 13:25**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-11**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	340		10	10	mg/L	-		08/12/15 15:26	1



# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJHB-081015-11**  
**Date Collected: 08/10/15 11:25**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-12**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	260		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJHB-081015-12**  
**Date Collected: 08/10/15 11:25**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-13**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	260		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

Client Sample ID: SJ4C-081115-11  
Date Collected: 08/11/15 09:52  
Date Received: 08/12/15 09:46

Lab Sample ID: 680-115487-14  
Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	140		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJ4C-081115-12**  
**Date Collected: 08/11/15 09:52**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-15**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	350		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

Client Sample ID: SJSR-081115-11  
Date Collected: 08/11/15 12:35  
Date Received: 08/12/15 09:46

Lab Sample ID: 680-115487-16  
Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	290		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJMH-081115-11**  
**Date Collected: 08/11/15 10:35**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-17**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	350		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJBB-081115-11**  
**Date Collected: 08/11/15 11:30**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-18**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	330		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJMC-081115-11**  
**Date Collected: 08/11/15 12:20**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-19**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10	10	mg/L	-		08/12/15 16:59	1



# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJME-081115-11**  
**Date Collected: 08/11/15 13:30**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-20**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	280		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJME-081115-12**  
**Date Collected: 08/11/15 13:35**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-21**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	290		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: MECT-081115-11**  
**Date Collected: 08/11/15 13:45**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-22**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	310		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJFP-081115-11**  
**Date Collected: 08/11/15 13:45**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-23**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	300		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJHB-081115-11**  
**Date Collected: 08/11/15 13:05**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-24**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	350		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJDS-081115-11**  
**Date Collected: 08/11/15 11:40**  
**Date Received: 08/12/15 09:46**

**Lab Sample ID: 680-115487-25**  
**Matrix: Water**

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	340		10	10	mg/L	-		08/12/15 16:59	1

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

Client Sample ID: SJLP-081115-11  
Date Collected: 08/11/15 14:25  
Date Received: 08/12/15 09:46

Lab Sample ID: 680-115487-26  
Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	330		10	10	mg/L	-		08/12/15 16:59	1

# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

## Method: 2540C-2011 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 680-395755/1  
Matrix: Water  
Analysis Batch: 395755

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			08/12/15 15:26	1

Lab Sample ID: LCS 680-395755/2  
Matrix: Water  
Analysis Batch: 395755

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	59.0	67.0		mg/L		114	80 - 120

Lab Sample ID: LCSD 680-395755/3  
Matrix: Water  
Analysis Batch: 395755

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	59.0	63.0		mg/L		107	80 - 120	6	25

Lab Sample ID: 680-115487-2 DU  
Matrix: Water  
Analysis Batch: 395755

Client Sample ID: SJME-081015-11  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	370		352		mg/L		4	5

Lab Sample ID: MB 680-395795/1  
Matrix: Water  
Analysis Batch: 395795

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			08/12/15 16:59	1

Lab Sample ID: LCS 680-395795/2  
Matrix: Water  
Analysis Batch: 395795

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	59.0	67.0		mg/L		114	80 - 120

Lab Sample ID: LCSD 680-395795/3  
Matrix: Water  
Analysis Batch: 395795

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	59.0	65.0		mg/L		110	80 - 120	3	25

Lab Sample ID: 680-115487-12 DU  
Matrix: Water  
Analysis Batch: 395795

Client Sample ID: SJHB-081015-11  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	260		270		mg/L		4	5

TestAmerica Savannah



# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

Lab Sample ID: 680-115487-22 DU  
Matrix: Water  
Analysis Batch: 395795

Client Sample ID: MECT-081115-11  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	310		318		mg/L	-	2	5

# QC Association Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

## General Chemistry

### Analysis Batch: 395755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115487-1	SJMC-081015-12	Total/NA	Water	2540C-2011	
680-115487-2	SJME-081015-11	Total/NA	Water	2540C-2011	
680-115487-2 DU	SJME-081015-11	Total/NA	Water	2540C-2011	
680-115487-3	SJMC-081015-11	Total/NA	Water	2540C-2011	
680-115487-4	SJ4C-081015-11	Total/NA	Water	2540C-2011	
680-115487-5	SJSR-081015-11	Total/NA	Water	2540C-2011	
680-115487-6	SJFP-081015-11	Total/NA	Water	2540C-2011	
680-115487-7	SJBB-081015-11	Total/NA	Water	2540C-2011	
680-115487-8	SJMH-081015-11	Total/NA	Water	2540C-2011	
680-115487-9	MECT-081015-11	Total/NA	Water	2540C-2011	
680-115487-10	SJLP-081015-11	Total/NA	Water	2540C-2011	
680-115487-11	SJDS-081015-11	Total/NA	Water	2540C-2011	
LCS 680-395755/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-395755/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
MB 680-395755/1	Method Blank	Total/NA	Water	2540C-2011	

### Analysis Batch: 395795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115487-12	SJHB-081015-11	Total/NA	Water	2540C-2011	
680-115487-12 DU	SJHB-081015-11	Total/NA	Water	2540C-2011	
680-115487-13	SJHB-081015-12	Total/NA	Water	2540C-2011	
680-115487-14	SJ4C-081115-11	Total/NA	Water	2540C-2011	
680-115487-15	SJ4C-081115-12	Total/NA	Water	2540C-2011	
680-115487-16	SJSR-081115-11	Total/NA	Water	2540C-2011	
680-115487-17	SJMH-081115-11	Total/NA	Water	2540C-2011	
680-115487-18	SJBB-081115-11	Total/NA	Water	2540C-2011	
680-115487-19	SJMC-081115-11	Total/NA	Water	2540C-2011	
680-115487-20	SJME-081115-11	Total/NA	Water	2540C-2011	
680-115487-21	SJME-081115-12	Total/NA	Water	2540C-2011	
680-115487-22	MECT-081115-11	Total/NA	Water	2540C-2011	
680-115487-22 DU	MECT-081115-11	Total/NA	Water	2540C-2011	
680-115487-23	SJFP-081115-11	Total/NA	Water	2540C-2011	
680-115487-24	SJHB-081115-11	Total/NA	Water	2540C-2011	
680-115487-25	SJDS-081115-11	Total/NA	Water	2540C-2011	
680-115487-26	SJLP-081115-11	Total/NA	Water	2540C-2011	
LCS 680-395795/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-395795/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
MB 680-395795/1	Method Blank	Total/NA	Water	2540C-2011	

TestAmerica Savannah

# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJMC-081015-12**

**Lab Sample ID: 680-115487-1**

Date Collected: 08/10/15 13:40

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJME-081015-11**

**Lab Sample ID: 680-115487-2**

Date Collected: 08/10/15 14:40

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJMC-081015-11**

**Lab Sample ID: 680-115487-3**

Date Collected: 08/10/15 13:35

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJ4C-081015-11**

**Lab Sample ID: 680-115487-4**

Date Collected: 08/10/15 15:05

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJSR-081015-11**

**Lab Sample ID: 680-115487-5**

Date Collected: 08/10/15 12:10

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJFP-081015-11**

**Lab Sample ID: 680-115487-6**

Date Collected: 08/10/15 10:35

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

TestAmerica Savannah

# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJBB-081015-11**

**Lab Sample ID: 680-115487-7**

Date Collected: 08/10/15 12:40

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJMH-081015-11**

**Lab Sample ID: 680-115487-8**

Date Collected: 08/10/15 11:35

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MECT-081015-11**

**Lab Sample ID: 680-115487-9**

Date Collected: 08/10/15 14:15

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJLP-081015-11**

**Lab Sample ID: 680-115487-10**

Date Collected: 08/10/15 09:40

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJDS-081015-11**

**Lab Sample ID: 680-115487-11**

Date Collected: 08/10/15 13:25

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395755	08/12/15 15:26	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJHB-081015-11**

**Lab Sample ID: 680-115487-12**

Date Collected: 08/10/15 11:25

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

TestAmerica Savannah

# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJHB-081015-12**

**Lab Sample ID: 680-115487-13**

Date Collected: 08/10/15 11:25

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJ4C-081115-11**

**Lab Sample ID: 680-115487-14**

Date Collected: 08/11/15 09:52

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJ4C-081115-12**

**Lab Sample ID: 680-115487-15**

Date Collected: 08/11/15 09:52

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJSR-081115-11**

**Lab Sample ID: 680-115487-16**

Date Collected: 08/11/15 12:35

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJMH-081115-11**

**Lab Sample ID: 680-115487-17**

Date Collected: 08/11/15 10:35

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJBB-081115-11**

**Lab Sample ID: 680-115487-18**

Date Collected: 08/11/15 11:30

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

TestAmerica Savannah

# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJMC-081115-11**

**Lab Sample ID: 680-115487-19**

Date Collected: 08/11/15 12:20

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJME-081115-11**

**Lab Sample ID: 680-115487-20**

Date Collected: 08/11/15 13:30

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJME-081115-12**

**Lab Sample ID: 680-115487-21**

Date Collected: 08/11/15 13:35

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MECT-081115-11**

**Lab Sample ID: 680-115487-22**

Date Collected: 08/11/15 13:45

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJFP-081115-11**

**Lab Sample ID: 680-115487-23**

Date Collected: 08/11/15 13:45

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJHB-081115-11**

**Lab Sample ID: 680-115487-24**

Date Collected: 08/11/15 13:05

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

TestAmerica Savannah

# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

**Client Sample ID: SJDS-081115-11**

**Lab Sample ID: 680-115487-25**

**Date Collected: 08/11/15 11:40**

**Matrix: Water**

**Date Received: 08/12/15 09:46**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

**Client Sample ID: SJLP-081115-11**

**Lab Sample ID: 680-115487-26**

**Date Collected: 08/11/15 14:25**

**Matrix: Water**

**Date Received: 08/12/15 09:46**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	50 mL	100 mL	395795	08/12/15 16:59	JER	TAL SAV
Instrument ID: NOEQUIP										

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah





**TestAmerica Laboratories, Inc.**

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:Form No. CA-C-WI-002, Rev. 4.5, dated 07/15/2015

**TestAmerica Laboratories, Inc.**

Form No. CA-C-WI-002, Rev. 4.5, dated 07/15/2015

5102 LaRoche Avenue

## Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Savannah, GA 31404-6019  
phone 912.354.7858 fax 912.352.0165

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

**TestAmerica Laboratories, Inc.**

[illegible]



5102 LaRoche Avenue

## Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Savannah, GA 31404-6019

phone 912.354.7858 fax 912.352.0165

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

**TestAmerica Laboratories, Inc.**

[illegible]

**TestAmerica Laboratories, Inc.**

Form No. CA-C-WI-002, Rev. 4.5, dated 07/15/2015



**TestAmerica Laboratories, Inc.**

Form No. CA-C-WI-002, Rev. 4.5, dated 07/15/2015

## Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 680-115487-2

Login Number: 115487

List Number: 1

Creator: Daughtry, Beth A

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	WO# list on COC does not match Project Summary provided to lab
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Certification Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 9

TestAmerica Job ID: 680-115487-2

## Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Colorado	State Program	8	N/A	12-31-15

TestAmerica Savannah